

BATTERY PARK CITY |

Ballfields &
Community Center
Resilience Project

Interim Solution
Design Status

Community
Board Meeting
September 26, 2019



Battery Park
City Authority



AGENDA



View looking West at the Community Center

- Project Overview
- Guiding Objectives Review
- Interim Solution Design Overview
- Drainage Improvements
- Landscape & Aesthetic Finishes
- Community Center Protection Update
- Construction Logistics
- Schedule
- Next Steps
- Questions & Comments

PROJECT OVERVIEW



View looking Southeast across the Ballfields

- Need for resilience
- Series of three previous meetings
 - Design requirements
 - Community input
 - Guiding Objectives

GUIDING OBJECTIVES REVIEW



- Flood risk
- Integration with landscape and built environment
- Minimize loss of field use and duration of construction
- Cost
- Schedule

INTERIM SOLUTION GUIDING OBJECTIVES

Guiding Objective	Interim Solution (DFE 12')
Flood Protection	Less than 10% chance of exceedance in 10 years
Integration with landscape and built environment	<ul style="list-style-type: none">• 5.4-foot max wall height• Use of existing infrastructure• Steel wall on all façades
Minimize loss of field use and duration of construction	6' - 8' of encroachment on field for grade beam operation total duration approx. 6 months
Cost	Est. \$4-5M
Schedule	Flood Protection by: Q2 2020

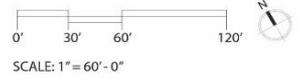
INTERIM SOLUTION DESIGN OVERVIEW



LEGEND

- █ MOVABLE FLOOD BARRIER
- █ INTERIM STEEL FLOOD BARRIER WITH ARCHITECTURAL TREATMENT
- █ CONCRETE FLOOD BARRIER WITH ARCHITECTURAL TREATMENT
- █ EXISTING FENCE

NOTE:
INTERIM DFE 12' (NAVD88)



INTERIM SOLUTION DESIGN OVERVIEW

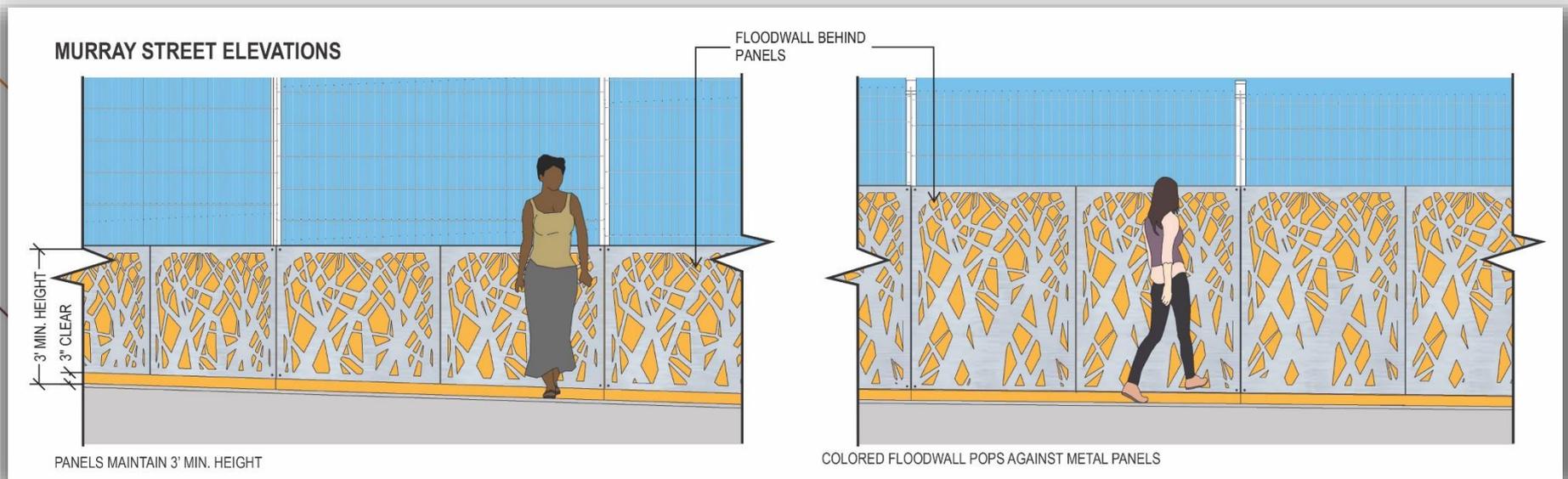


View looking West along Murray Street

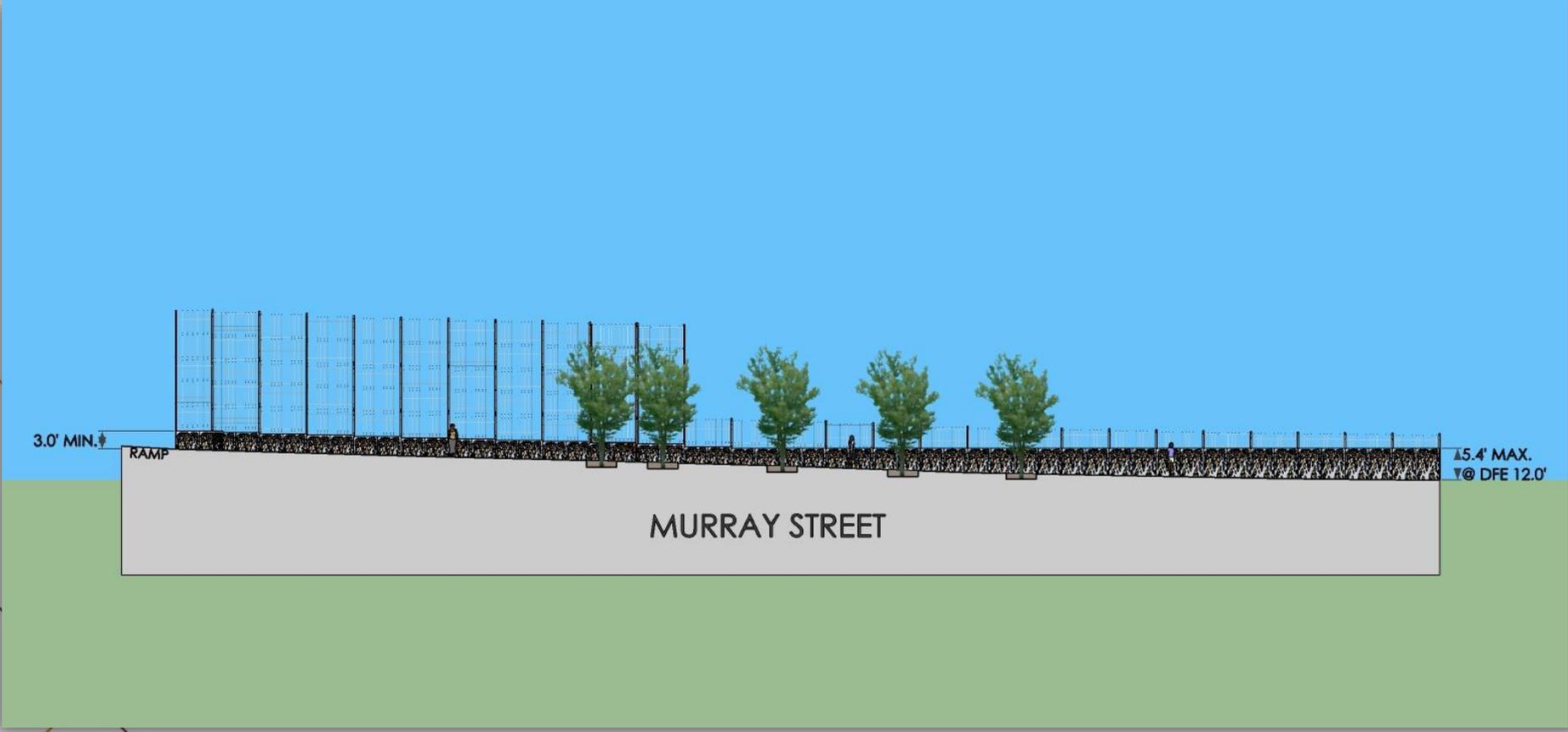
- Level of Protection
 - DFE 12' = BFE 11' plus 1' (no SLR, no Freeboard)
 - Max wall height is 5.4' to meet DFE and utilize existing infrastructure where feasible
 - Seepage not an issue (Seepage Analysis Findings)
- Reuse Existing Fence Foundations
- 1-inch Thick Steel Plate
- Alignment Exterior to Fence
- 2 Moveable Flood Protection Devices

INTERIM SOLUTION DESIGN OVERVIEW

- Minimum height of decorative panel is 3', maximum is 5.4'
- Design
 - Painted Concrete/steel plate
 - Finishes



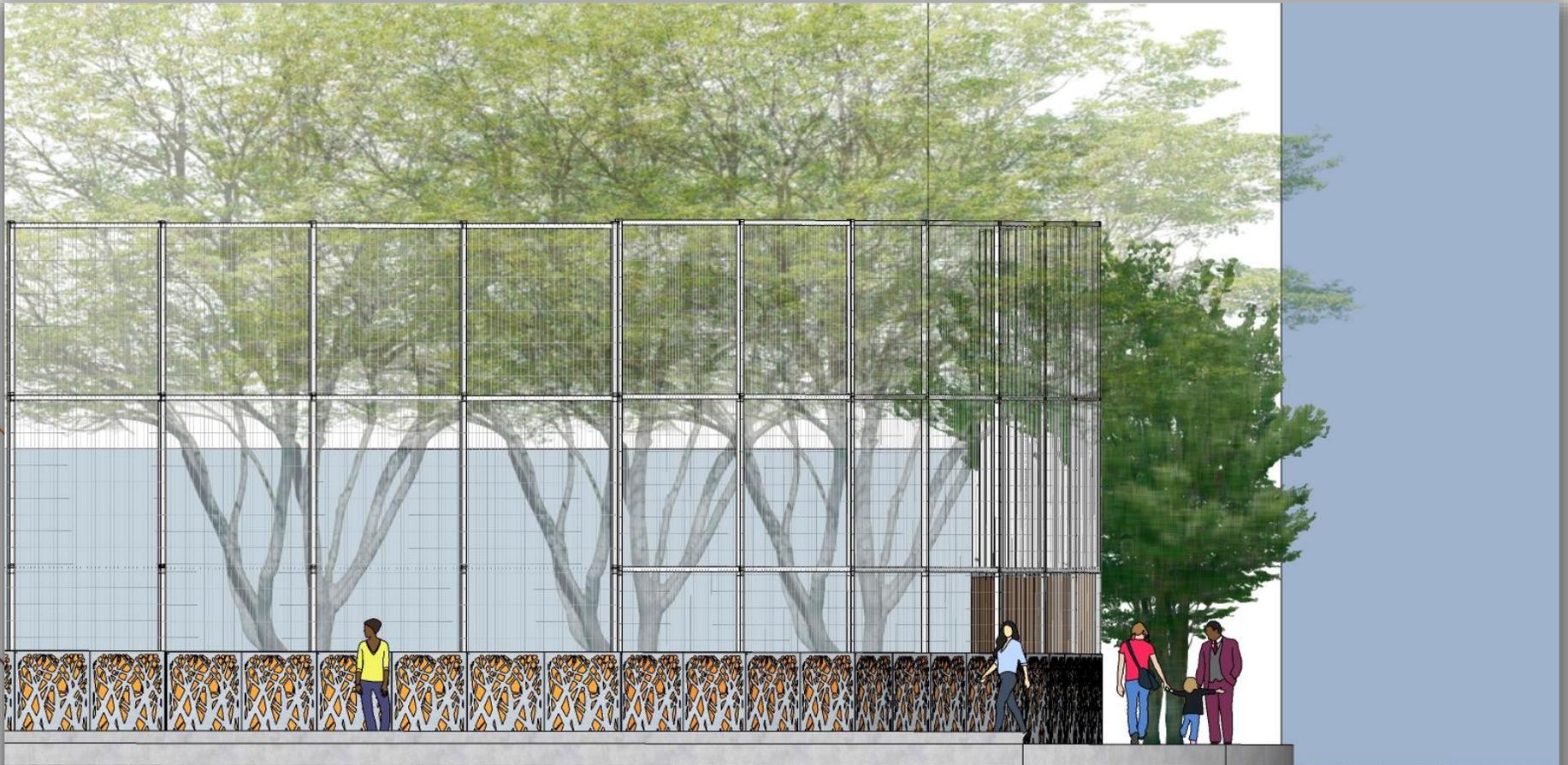
INTERIM SOLUTION DESIGN OVERVIEW



INTERIM SOLUTION DESIGN OVERVIEW

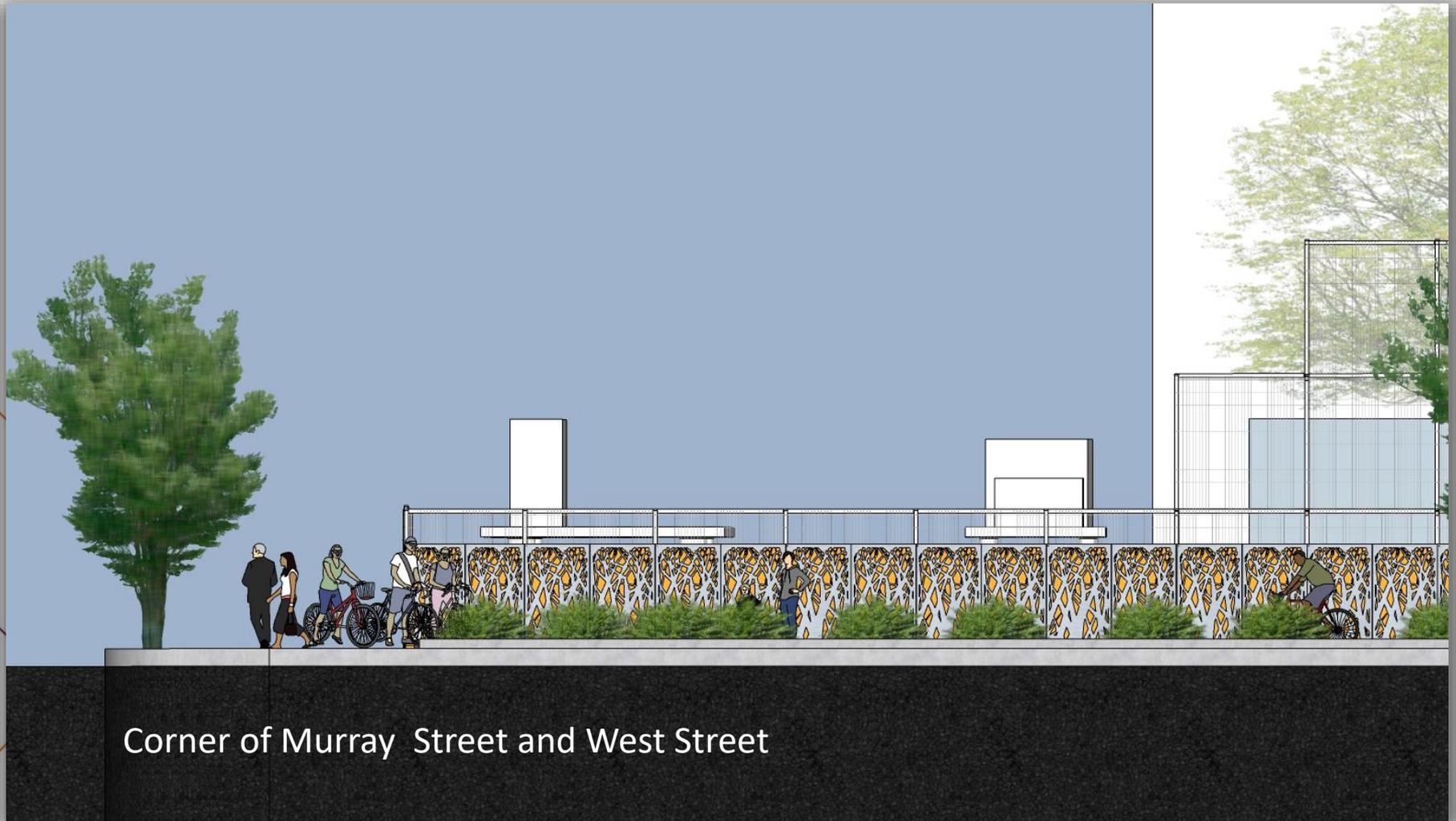


INTERIM SOLUTION DESIGN OVERVIEW



Corner of Warren Street and West Street

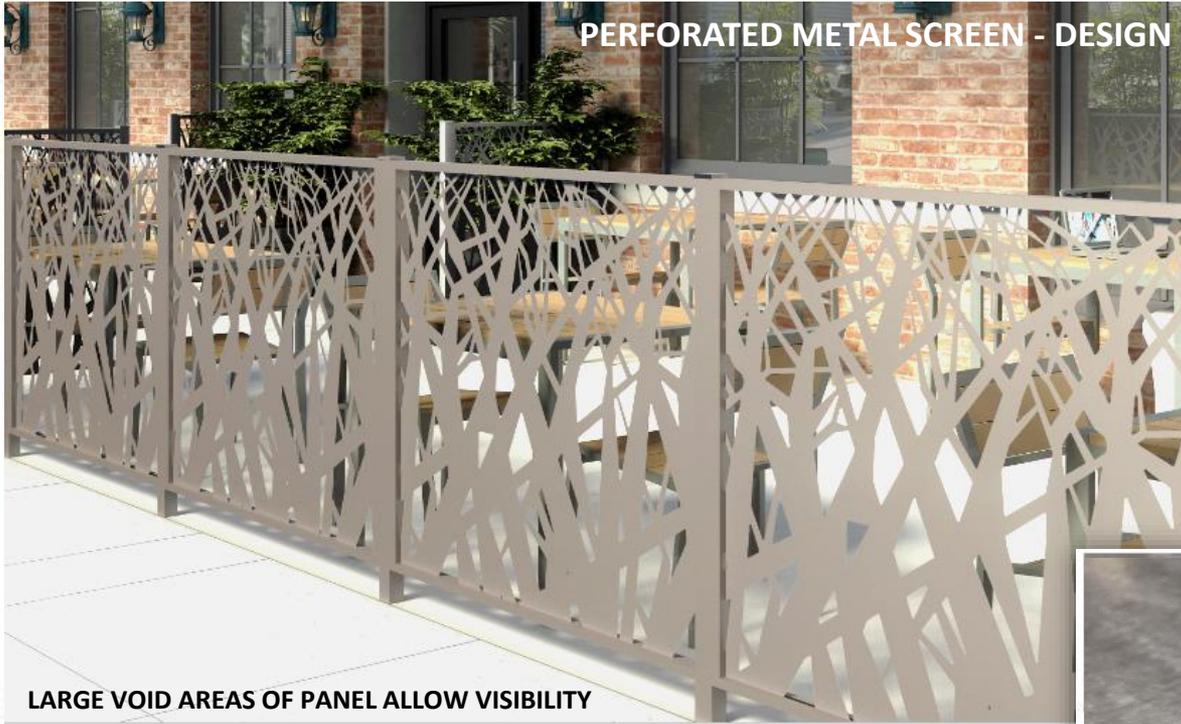
INTERIM SOLUTION DESIGN OVERVIEW



Corner of Murray Street and West Street

INTERIM SOLUTION DESIGN OVERVIEW

PERFORATED METAL SCREEN - DESIGN



LARGE VOID AREAS OF PANEL ALLOW VISIBILITY

- Standard Design Opt. to reduce lead time
- 1/2 –inch anodized aluminum
- Stainless Steel Color



RANDOM BRUSH WITH CLEAR ANODIZATION

INTERIM SOLUTION DESIGN OVERVIEW

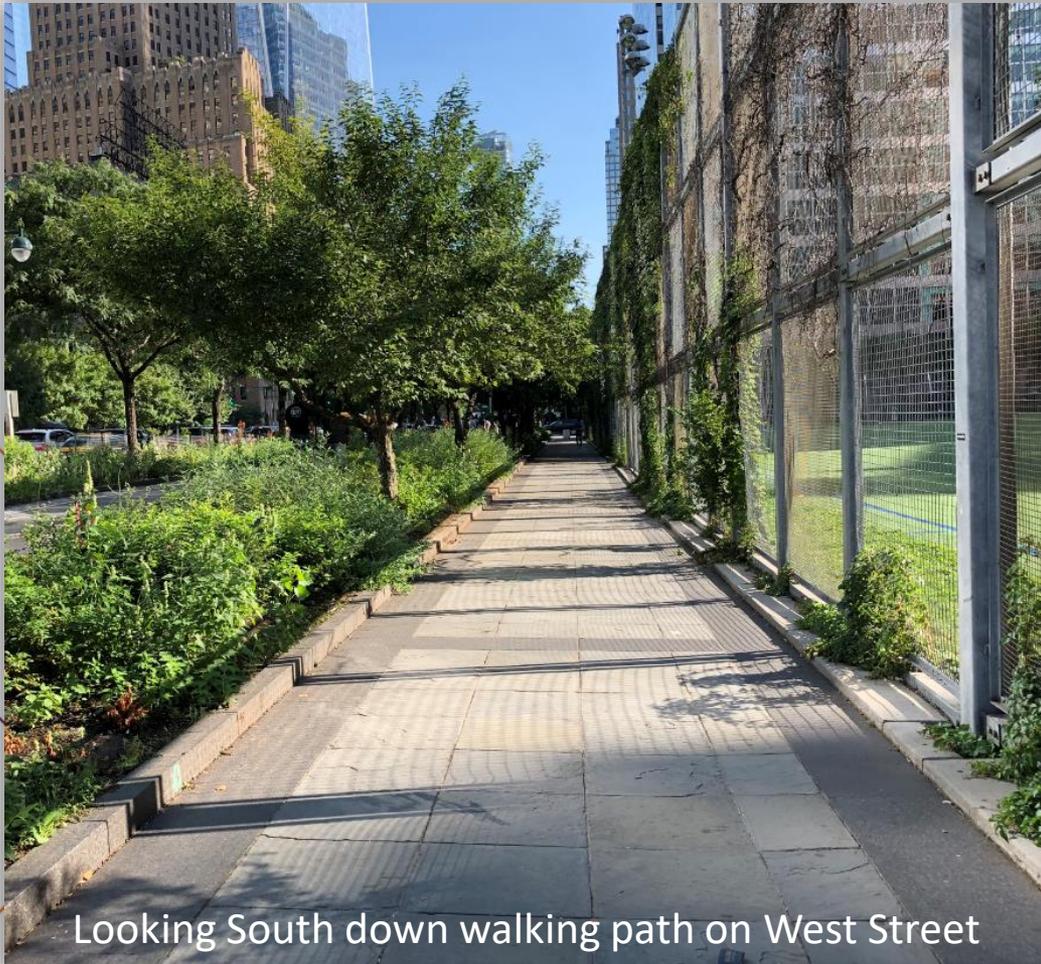
Aesthetics:

- Panels step with grade change

Maintenance:

- 3" clear at the bottom of the panels to the pavement, allowing for easier removal of debris underneath
- Cover plate on top of the decorative panel to reduce the amount of debris falling between the panel and steel-plate surface
- Anti-graffiti

INTERIM SOLUTION DRAINAGE IMPROVEMENTS



- Improved walking path drainage on West Street
- New Catch Basins
- Opportunity to assess drainage conditions

Looking South down walking path on West Street

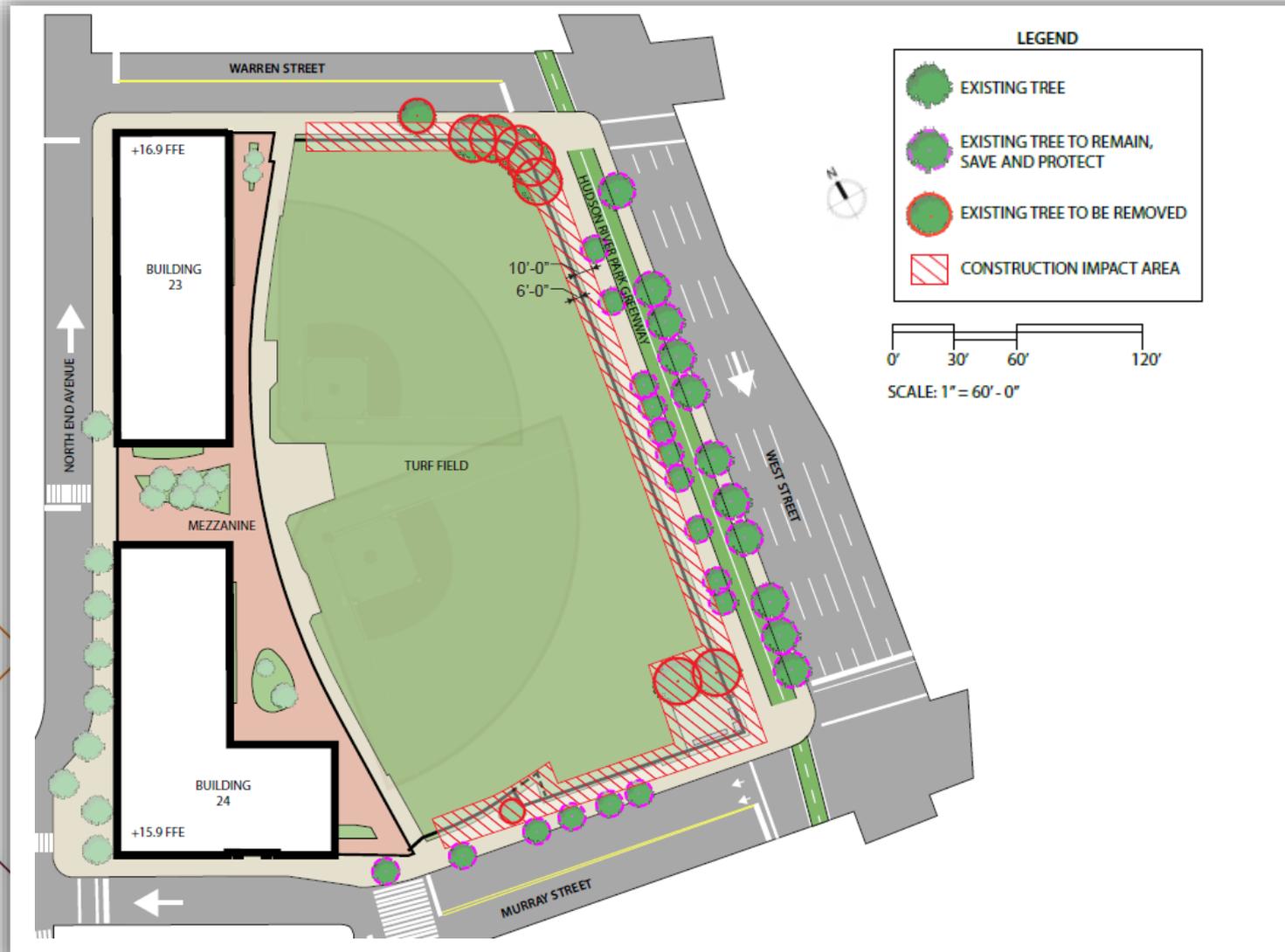
INTERIM SOLUTION LANDSCAPE & AESTHETIC FINISHES

- Trees
 - Protect what is feasible, replace what is not
 - *Use of air spades to protect roots*
 - 8 interior trees and 2 NYC Parks Dept. trees will be impacted
 - Coordination with BPCA Horticulture team



Trees in Northeast corner of Ballfields

INTERIM SOLUTION LANDSCAPE & AESTHETIC FINISHES



INTERIM SOLUTION LANDSCAPE & AESTHETIC FINISHES



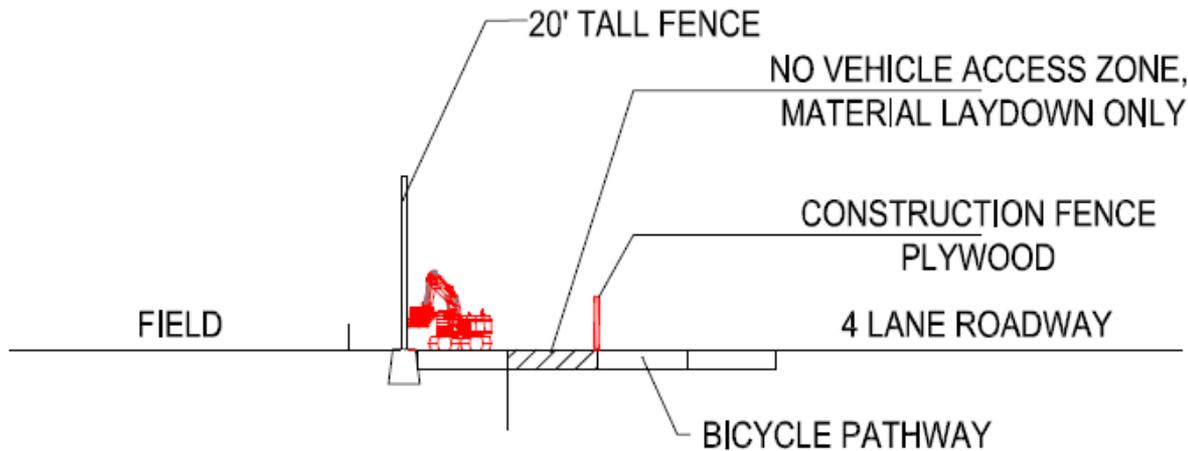
View looking Southeast towards West Street

- Vines
 - Project will replace in kind

INTERIM SOLUTION CONSTRUCTION LOGISTICS

- Construction Logistics
 - Ballfields operable during construction
 - Best efforts to minimize footprint of staging areas by contractor (likely to be located within parking lane on Warren Street and/or Murray Street)
 - Direct load to install panels where feasible
 - Temporary closure of West Street walking path, bike path to remain open
 - Work from mid-point along West Street both North and South to minimize construction duration

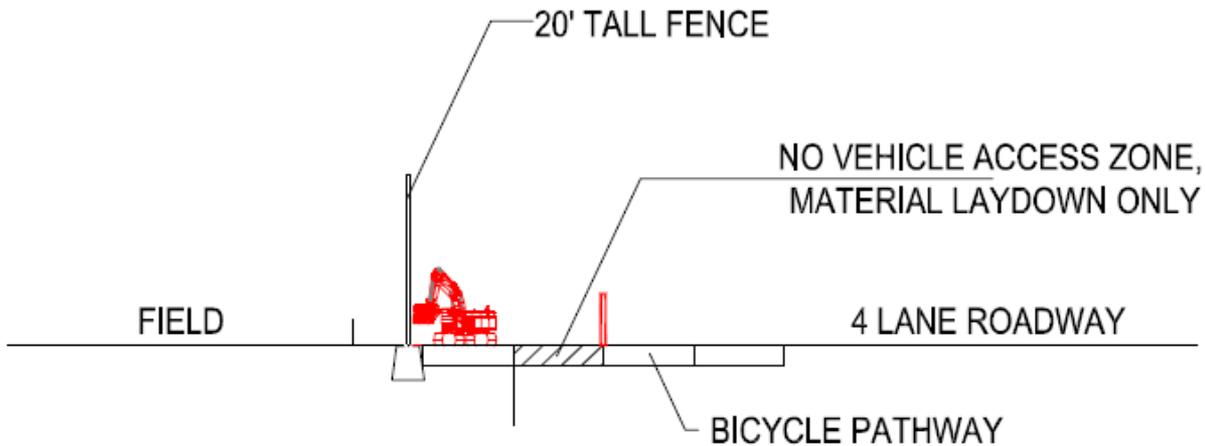
INTERIM SOLUTION CONSTRUCTION LOGISTICS



PHASE 0 - ENABLING WORKS

INSTALL CONSTRUCTION FENCE
AND CAPTURE WORK AREAS.

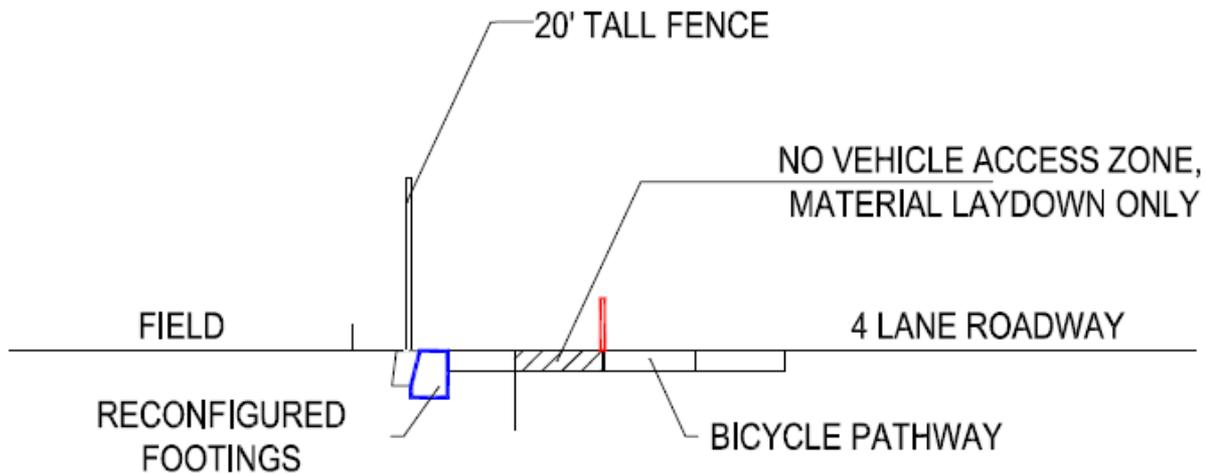
INTERIM SOLUTION CONSTRUCTION LOGISTICS



PHASE 1 - EXCAVATION

WORK TO BE COMPLETED WITH A MINI EXCAVATOR AND HAND EXCAVATION. ANY DEBRIS TO BE REMOVED SHALL BE BROUGHT TO THE STAGING AREA FOR HAULING.

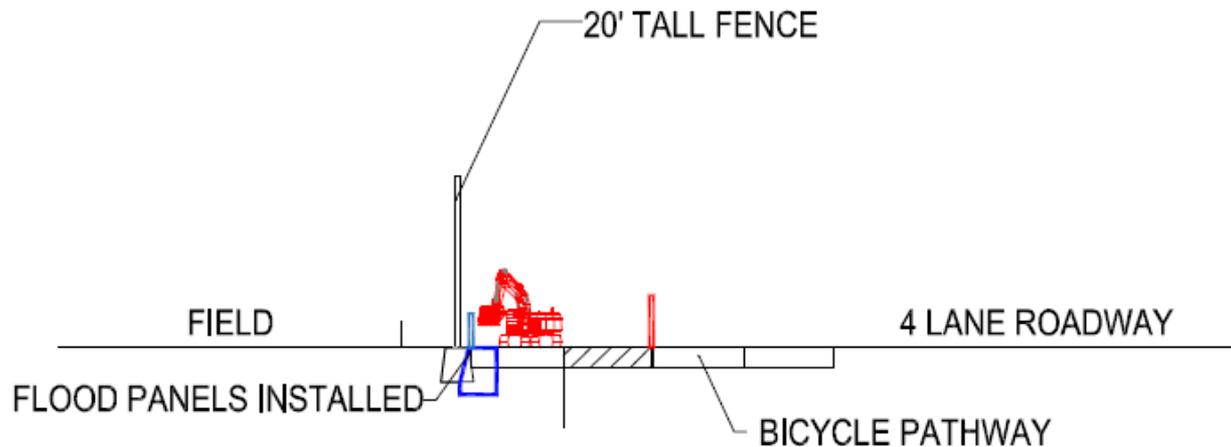
INTERIM SOLUTION CONSTRUCTION LOGISTICS



PHASE 2 - FOUNDATIONS

CONCRETE WORK SHALL BE
COMPLETED IN THIS PHASE.

INTERIM SOLUTION CONSTRUCTION LOGISTICS

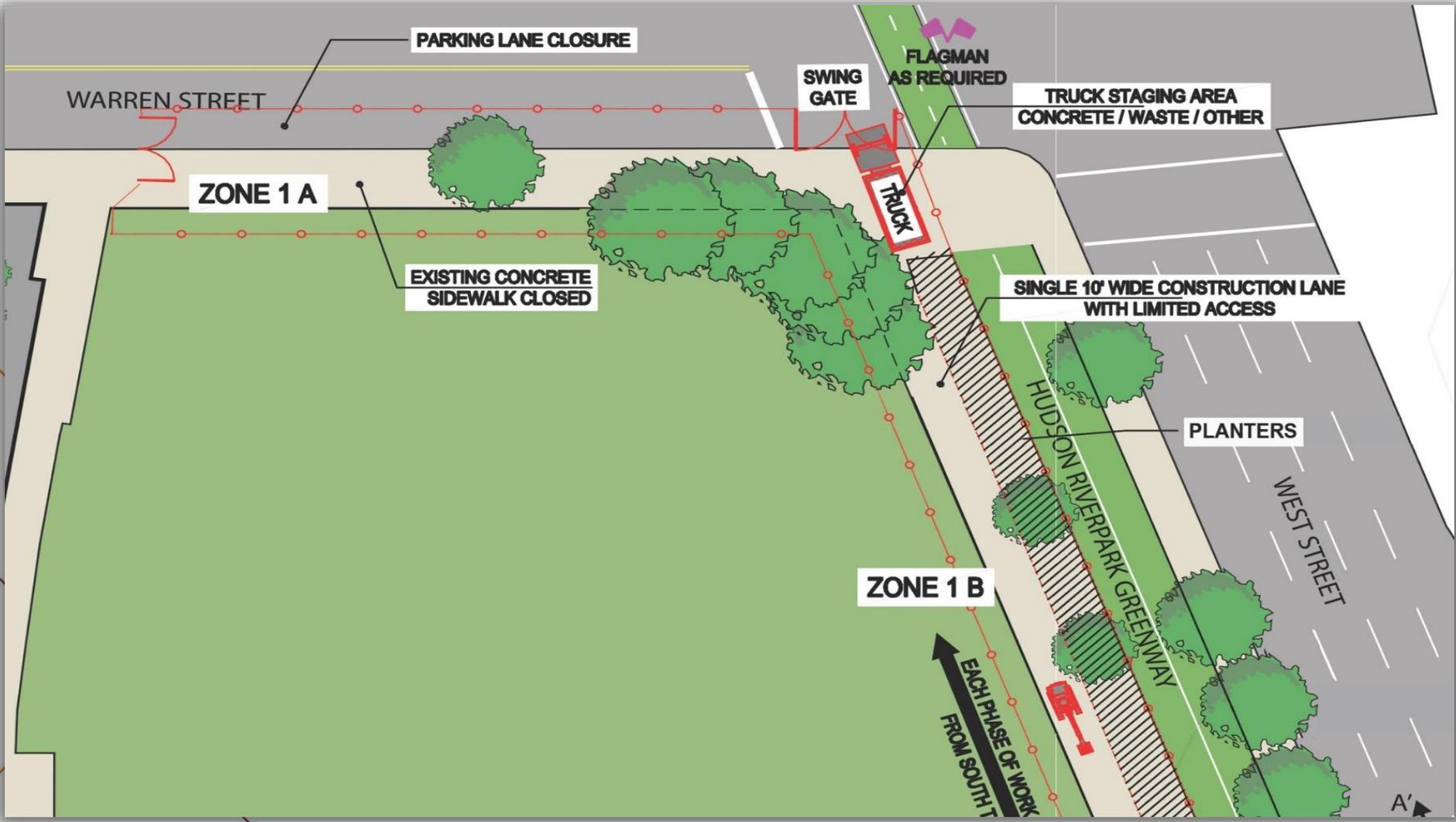


PHASE 3 - FLOOD WALL INSTALLATION

FLOOD PANELS TO BE INSTALLED SHALL BE DELIVERED TO AND STAGED ON MATERIAL LAYDOWN AREA.

PANELS CAN BE LIFTED BY EXCAVATOR TO SET THEM IN PLACE. A SMALL CHERRY PICKER MAY BE REQUIRED. TBD.

INTERIM SOLUTION CONSTRUCTION LOGISTICS



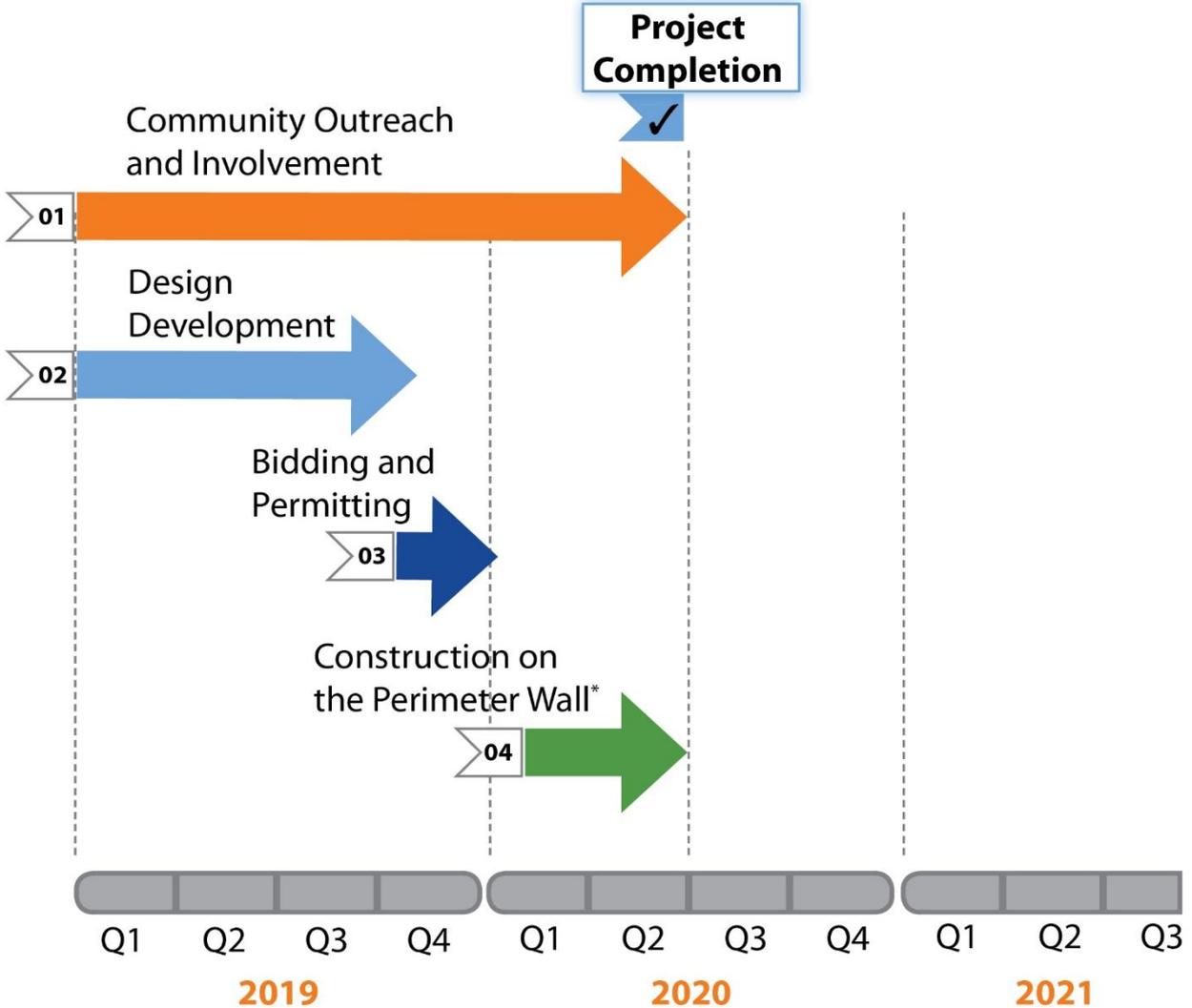
INTERIM SOLUTION COMMUNITY CENTER PROTECTION

Options

- Façade Replacement
- Deployable System

Photo credit: hanranhan Meyers architects (hMa)

INTERIM SOLUTION SCHEDULE



*Construction of community center flood protection TBD

INTERIM SOLUTION SUMMARY

The Interim Solution:

1. Protects the Ballfields & Community Center
2. Flood protection in Q2 2020!
3. Costs significantly less than other solutions
4. Integrates into Battery Park Resiliency Plan
5. Minimizes disruption to ballpark activity
6. Has less of a visual impact with a 5.4' wall
7. Addresses drainage issues along walking path at West Street
8. Visually appealing & attractive
9. The project includes YOUR input

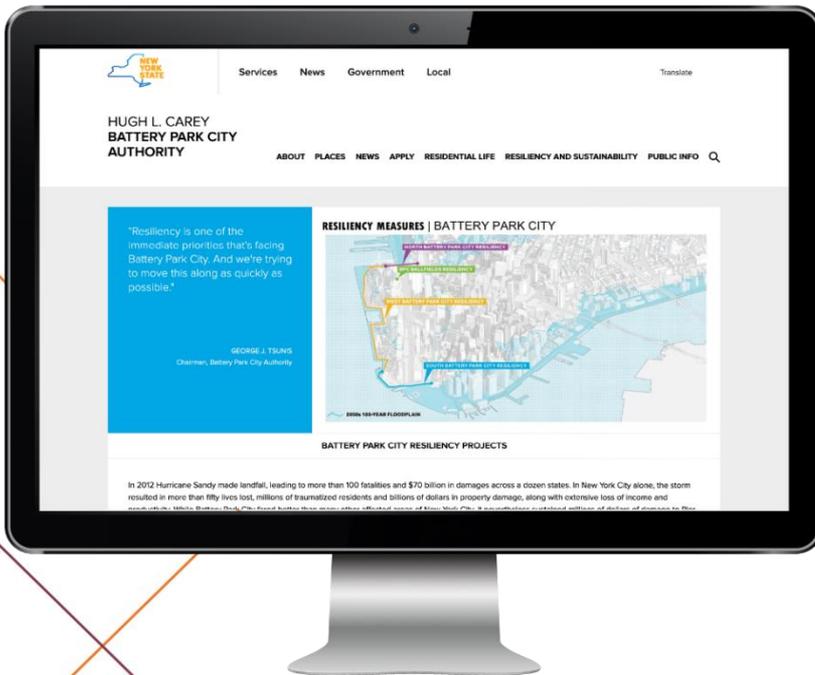


INTERIM SOLUTION NEXT STEPS

- Refine Design
- 95% Design of Ballfields Steel Barrier
- Finalize Community Center Flood Protection
- Contractor RFP

CONNECT

Follow the Project



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